

5149547



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

009189

C10-OH

Job Sheet OH189825



Part No: C10-OH

Job Qty: 1 ea

Part Name: C-Series Remote Hook 10,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/30/19

Job Tracking No: S/N m883-01

Due Date: 3/29/19

Created By: Jesse White

Type: Rework - OH

Description: RA562

Note: O&OPM-C10 REV.4 IPP REV:A 18.01.30 NEW ISSUE DD VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Start up Operation	1 Ea	3/29/19	3/29/19	0.00	0.00	Start Up Small Fab-4		
110	Small Fab	1 pcs	3/29/19	3/29/19	0.00	1.00	Small Fab-9		
120	QC	1 pcs	3/29/19	3/29/19	0.00	0.00	QC5		
130	Customer Acceptance	1 pcs	3/29/19	3/29/19	0.00	0.00			
140	Outsource	1 pcs	3/29/19	3/29/19			SKY002-VC	5	
150	Packaging	1 pcs	3/29/19	3/29/19	0.00	0.00	Packaging2		
152	Small Fab - 2 - B4B	1 pcs	3/29/19	3/29/19	0.00	0.33	Small Fab - 1 - B4B		
							Small Fab - 2 - B4B		
							Small Fab - 3 - B4B		
							Small Fab - 4 - B4B		
							Small Fab - 5 - B4B		
							Small Fab - 6 - B4B		
							Small Fab - 7 - B4B		
155	Outsource	1 pcs	3/29/19	3/29/19			GRO002-VC	10	
160	QC	1 pcs	3/29/19	3/29/19	0.00	0.00	QC6		
170	Small Fab - 3 - B4B	1 pcs	3/29/19	3/29/19	0.00	1.00	Small Fab-9		
180	QC	1 pcs	3/29/19	3/29/19	0.00	0.00	QC5		
185	DC	1 pcs	3/29/19	3/29/19	0.00	0.00	DC		
190	Packaging	1 pcs	3/29/19	3/29/19	0.00	0.00	Packaging3-2		
200	QC21-FG	1 Ea	3/29/19	3/29/19	0.00	0.00	QC21		

Part Op 110 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.

Descriptions: 152 - Triage parts to be sent out for plating

170 - RE-ASSEMBLY. ***All assembly to be done in accordance with manual*** TEST ASSEMBLY.

185 - Photocopy blue file and create labels

140: B042571 - outsource not

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
C10-AR	C-Series Remote Hook 10,000 lbs Lift Capacity	1 Ea (1 ea)	100-Start up Operation	5149369
188-FPSS-1/4-20-3/8	Set Screw	2 Ea (2 ea)	170-Small Fab	5048557
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	170-Small Fab	5110495
188-SHCS-1032-3/4	Bolt	8 Ea (8 ea)	170-Small Fab	5049355

Plex 1/30/19 4:16 PM dart.white.jesse

Entered: _____

Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread		Other/Details:			

2595K2	Heat Shrink	1 ft (1 ea)	170-Small Fab	5049360
32446	Crimp Terminal	2 Ea (2 ea)	170-Small Fab	5090924
32448	16-14 AWG Knife Connector	2 Ea (2 ea)	170-Small Fab	5151100
600.1309	CANAM Plate ID Label	1 pcs (1 ea)	170-Small Fab	
600.1347	C10 Warning Label	1 pcs (1 ea)	170-Small Fab	5092299
AN4-23A 24A	Bolt	2 Ea (2 ea)	170-Small Fab	1123434 + 5 130326
AN6-31A	Bolt	6 Ea (6 ea)	170-Small Fab	5030806
C10-1	Side Plate Solenoid Side	1 Ea (1 ea)	170-Small Fab	
C10-10-1	Actuator Shaft	1 pcs (1 ea)	170-Small Fab	
C10-10-2 P	Actuator Pin	1 pcs (1 ea)	170-Small Fab	5029190
C10-10-3	Actuator Bushing	2 pcs (2 ea)	170-Small Fab	5082408
C10-11	Manual Release Knob	1 pcs (1 ea)	170-Small Fab	
C10-12	Solenoid	1 pcs (1 ea)	170-Small Fab	
C10-12-0	Solenoid	1 pcs (1 ea)	170-Small Fab	
C10-12-1 C10-12-1	Spring Pin	1 pcs (1 ea)	170-Small Fab	
C10-2	Side Plate - MRK	1 Ea (1 ea)	170-Small Fab	
C10-21-1	Clock Spring	2 pcs (2 ea)	170-Small Fab	
C10-21-2	Spring Cover	2 pcs (2 ea)	170-Small Fab	
C10-21-4	Lock Washer	8 Ea (8 ea)	170-Small Fab	5089140
C10-22	Lock Bumper	3 pcs (3 ea)	170-Small Fab	① 5123737 ② 5144749
C10-23	Keeper Weldment	1 pcs (1 ea)	170-Small Fab	5029200
C10-23-1 OK	Keeper Spacer	1 pcs (1 ea)	170-Small Fab	5060601
C10-23-2	Keeper Spring	1 pcs (1 ea)	170-Small Fab	5029201
C10-23-3	Keeper Bushing	2 pcs (2 ea)	170-Small Fab	5096426
C10-3	Load Beam Bumper	1 pcs (1 ea)	170-Small Fab	
C10-4	Lock	1 pcs (1 ea)	170-Small Fab	
C10-4-10	Spring Anchor Pin	2 pcs (2 ea)	170-Small Fab	5029208
C10-4-11	Lock Shaft	1 pcs (1 ea)	170-Small Fab	
C10-4-2	Lower Lock Roller	1 pcs (1 ea)	170-Small Fab	
C10-4-3	Upper Lock Roller	1 pcs (1 ea)	170-Small Fab	
C10-4-4	Upper Lock Roller Shaft	1 pcs (1 ea)	170-Small Fab	
C10-4-5	Lower Lock Roller Shaft	1 pcs (1 ea)	170-Small Fab	
C10-4-6 P	Lock Spring	1 pcs (1 ea)	170-Small Fab	5029215
C10-4-7 P	Spring Retaining Pin	1 pcs (1 ea)	170-Small Fab	5029216
C10-4-8	Lock Bushing	2 pcs (2 ea)	170-Small Fab	① 5060579 ② 074860X
C10-4-9	Upper Roller DU Bearing	1 pcs (1 ea)	170-Small Fab	5029218
C10-4-11	Strain Relief Connector	1 Ea (1 ea)	170-Small Fab	
C10-5A	Load Beam Assembly	1 pcs (1 ea)	170-Small Fab	
C10-7	Locating Pin	3 pcs (3 ea)	170-Small Fab	501822
C10-8 PO	Trunnion Bushing	2 pcs (2 ea)	170-Small Fab	5125590
C10-9-1	Latch	1 Ea (1 ea)	170-Small Fab	
C10-9-2	Latch Bearing	1 Ea (1 ea)	170-Small Fab	51562625 141337
C10-9-4 PO	Latch Shaft Bearing	2 pcs (2 ea)	170-Small Fab	5125643
C10-9-5	Latch Pin	1 pcs (1 ea)	170-Small Fab	
C10-9-6	Latch Return Spring	2 Ea (2 ea)	170-Small Fab	5080841
G2-14-2	Label Rivets	2 Ea (2 ea)	170-Small Fab	
C3-12-6	Lock Roller Pin Circlip	2 Ea (2 ea)	170-Small Fab	① 5072853 ② 5157956
C45-12-6	Retaining Ring	2 Ea (2 ea)	170-Small Fab	5029303
C45-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	170-Small Fab	
C45-8-5	Solenoid Cover	1 pcs (1 ea)	170-Small Fab	
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	170-Small Fab	5164040
EL314-SJTOW	Long Line Electrical Wire, 14/3 Gauge	1 ft (1 ea)	170-Small Fab	
MS21044N6	Nut, Self-Lock .375-24, UNJF-3B	6 Ea (6 ea)	170-Small Fab	5156449
MS21083N4	Nut	4 Ea (2 ea)	170-Small Fab	5062621
MS27039-4-08	Screw	1 Ea (1 ea)	170-Small Fab	5039330
NAS1149F0432P	Washer	2 Ea (2 ea)	170-Small Fab	5131202
NAS1149F0463P	Washer	3 Ea (3 ea)	170-Small Fab	5137713
NAS1149F0632P	Washer	12 Ea (12 ea)	170-Small Fab	50485575 051477-2
C10-6-PO	TRUNNION	1		5120950
C10-23	KEEPER	1		5003051 5003051
C10-12	SOLENOID	1		5103938
C10-4-2	Lower bushing lock roller	1		5083105

XTRA PART TO BE CHARGE TO CLIENT

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Start up Operation	C10	1	0	0
170-Small Fab	188-FPSS-1/4-20-3/8	2	132	0
	188-FPSS-1032-1/4	2	226	0
	188-SHCS-1032-3/4	8	298	0
	2595K2	1	21	0
	32446	2	814	0
	32448	2	125	0
	600.1309	1	0	0
	600.1347	1	15	0
	AN4-23A	2	698	0
	AN6-31A	6	45	0
	C10-1	1	7	0
	C10-10-1	1	2	0
	C10-10-2	1	100	0
	C10-10-3	2	13	0
	C10-11	1	9	0
	C10-12	1	7	0
	C10-12-0	1	10	0
	C10-12-1	1	96	0
	C10-2	1	7	0
	C10-21-1	2	54	0
	C10-21-2	2	16	0
	C10-21-4	8	277	0
	C10-22	3	24	0
	C10-23	1	6	0
	C10-23-1	1	51	0
	C10-23-2	1	34	0
	C10-23-3	2	21	0
	C10-3	1	18	0
	C10-4	1	10	0
	C10-4-10	2	90	0
	C10-4-11	1	20	0
	C10-4-2	1	0	0
	C10-4-3	1	0	0
	C10-4-4	1	0	0
	C10-4-5	1	0	0
	C10-4-6	1	17	0
	C10-4-7	1	13	0
	C10-4-8	2	15	0
	C10-4-9	1	12	0
	C10-41	1	31	0
	C10-5A	1	11	0
	C10-7	3	150	0
	C10-8	2	2	0
	C10-9-1	1	21	0
	C10-9-2	1	9	0
	C10-9-4	2	5	0
	C10-9-5	1	18	0
	C10-9-6	2	16	0
	C2-14-2	2	196	0
	C3-12-6	2	37	0
			122	0
			15	0
			21	0
			36	0
			617	0
			34	0
			178	0
			228	0
			642	0
			637	0
			427	0



Container No: S149547



Part: C10

Job No: OH189825

Serial No/Batch: m883 - 01

Revision: 4

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 CANADA
 TEL.: 1 613 632-5200
 Email: sales@dartaero.com
 www.dartaerospace.com

Date: 02/04/19

nd.

Plex 1/30/19 4:16 PM dart.white.jesse

Entered: _____ Date: _____

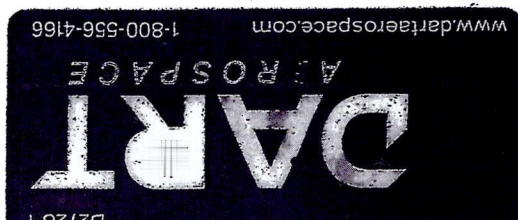


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



DATE: 2019/02/01

N.D.T

MODEL: C10

S/N : M883-01

Job : OH189825

RA # 562

P/N	DESCRIPTION	QUANTITY
C10-1	SIDE PLATE (SELENOID)	1
C10-2	" " MRK	1
C10-5A	LOAD BEAM	1
C10-6	TRUJIO	1
C10-10-1	ACTUATOR SHAFT	1
C10-9-1	LATCH	1
C10-9-5	LATCH SHAFT	1
C10-4	LOCK	1
C10-4-4	UPPER LOCK ROUER SHAFT	1
C10-4-5	LOWER LOCK " "	1
C10-4-3	UPPER LOCK ROUER	1
C10-4-2	LOWER LOCK ROUER	1
C10-4-11	LOCK SHAFT	1
C10-23-1	KEEPER SPACER	1



Remote Cargo Hook Test Form

C10

PRETEST

Work Order

OH189825

Customer

RAS62

Serial Number

M883-01

Date

2019/04/31

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	25,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	PASS
10	5,000	Electircal, 25 volts	No "hang ups" permitted	N/A	PASS
2	10,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	7,500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	5,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	2,500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
1	10,000	Electircal, 20 volts	Current shall not exceed 11.3A	8.3 Amp.	PASS
1	10,000	Electircal, 28 volts	Current shall not exceed 15.8A	11.5 Amp.	PASS
1	10,000	Manual		N/A	PASS
1	10,000	Impact Test	Impact shackle 10 times, shall not release	N/A	PASS
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	1.8 Ohms	PASS
1	N/A	Electircal Continuity	Across both wires	N/A	PASS

Test Conducted By

ALAN PATRY

Technician

Signature:

QC 5 Small FAB / QA

Submit



Overhaul Incoming Inspection
C10 Cargo Hook

Customer OH189825

Date 2019/FEB/01

Part Number C10

Serial Number M883-01

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

<u>C10-12 SELENOID</u>	☐
<u>C10-23 KEEPER WELDMENT</u>	☐
<u> </u>	☐
<u> </u>	☐
<u> </u>	☐
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<u> </u>	☐
<u> </u>	☐

Inspected By ALAIN PATRY



Overhaul Incoming Inspection
C10 Cargo Hook

Customer OH189825

Date 2019/FEB/01

Part Number C10

Serial Number M883-01

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

C10-12 SELENOID

☐

C10-23 KEEPER WELDMENT

☐☐☐☐☐☐☐☐☐

Inspected By ALAIN PATRY

QC Approval:

Inspection date:

Received Date:

30-Jan-2019

RA562

Waiting
for
job #



**HELICOPTER
TRANSPORT
SERVICES**

Helicopter Transport Services, LLC
14497 Keil Road NE, Aurora, OR 97002
Phone: 503-776-9300 Fax: 503-776-9304
<http://www.htshelicopters.com/>

Overhaul Order #HTR-5416

Date	Jan 24, 2019
Created By	jerrys
Type	Overhaul
Currency	USD
Page 1 / 1	

Overhaul Order #HTR-5416

To	Order from
DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY ON K6A2H8 CANADA Tel: 613-632-3336, Fax: 613-632-4443 Email: lcantin@dartaero.com / Lacey Cantin ext 247	UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 USA Tel: 503-776-9300, Fax: 503-776-9305
Ship to	Bill to
UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 Accounting: htsaccounting@htshelicopters.com Procurement: htsparts@htshelicopters.com Tel: 503-776-9300, Fax: 503-776-9305	UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 Accounting: htsaccounting@htshelicopters.com Procurement: htsparts@htshelicopters.com Tel: 503-776-9300, Fax: 503-776-9305

** Work to be accomplished at this time **

Please, perform Overhaul

Parts description

Part Number	Description	Tracking #	Ser/Batch #	TTSN	TTSO	Reg	Est. Cost
C-10	REMOTE CARGO HOOK, 10,000 LBS	123363	M883-01				1491.00
C.C	1141	Defect	RA# Removed from N91158, Due Overhaul evaluation. Cost Estimate and Approval is Required on all items. Completed certification must match repair/overhaul order. Certificate of conformance is required. Please notify Helicopter Transport Services if you are unable to comply with this requirement. All quotes or questions should be directed to Jerry Sullivan sullivanj@htshelicopters.com 503-776-9300 ext 112				

RA562

24x24x24 (70#)

When the work is completed, please return the part(s) via FEDEX ECONOMY no: 2698 8834 2

Signature

Date

RETURN AUTHORIZATION**RA #:****RA562****Date:**

January 25, 2019

Attention:

Jerry Sullivan

E-mail:

sullivanj@htshelicopters.com

From:

Jennifer Renwick

RETURN ADDRESS☒ Hawkesbury

Dart Aerospace Ltd

1270 Aberdeen Street

Hawkesbury, ON K6A 1K7, CA

1-613-632-3336

☐ Vista

Dart Aerospace Ltd.

3030 Enterprise Court, Suite A

Vista, CA 92081-8347, US

1-760-724-5300

☐ Eugene

Dart Aerospace Ltd.

190 S. Danebo Avenue

Eugene, OR 97402, US

1-541-344-9953

SHIPPING

Courier: Customers Choice

Account #: Customers Account

COMMERCIAL INVOICE INFORMATION

Item #1		Item #2	
P/N:	C10	P/N:	0
Description:	Hook	Description:	0
Qty:	1	Qty:	0
Flown:	N/A	Flown:	0
Customs Value USD:	\$500	Customs Value USD:	\$0
Batch / Serial #	M883-01	Batch / Serial #	0
Item #3		Item #4	
P/N:	0	P/N:	0
Description:	0	Description:	0
Qty:	0	Qty:	0
Flown:	0	Flown:	0
Customs Value USD:	\$0	Customs Value USD:	\$0
Batch / Serial #	0	Batch / Serial #	0
Item #5		Item #6	
P/N:	0	P/N:	0
Description:	0	Description:	0
Qty:	0	Qty:	0
Flown:	0	Flown:	0
Customs Value USD:	\$0	Customs Value USD:	\$0
Batch / Serial #	0	Batch / Serial #	0

ADDITIONAL RETURN AUTHORIZATION INFORMATION

- Print RA form, complete Part Disposition section and include a copy with the shipment.
- Ensure the RA number is referenced on all documents. Failure to do so may result in delivery refusal.
- Ensure the shipment is directed to the correct facility referenced above. Failure to do so will result in delays and additional shipping costs.
- Commercial invoice must include the following statement: "Parts are aircraft parts being returned to the manufacturer."
- International shipments require commercial invoice attached to the outside of the box.
- Where applicable, the original Release Certificate, STC's, Installation Instructions, Maintenance Manual Supplement, Flight Manual Supplement, packing slips and removable tag must accompany the shipment.
- Return authorization expires in 30 days. If no charge products were supplied, these will be invoiced upon expiration of the RA.
- Returned items will be fully inspected by Quality Control and credit will be issued for items deemed to be new, un-flown, traceable and to the current revision.
- A 15% minimum restocking fee applies, additional fees may apply upon receipt and inspection if items require rework or cannot be returned to stock
- Items should be adequately packaged to prevent shipping damage.
- For complete terms & conditions, visit www.dartaerospace.com

PART DISPOSITION (To be completed and returned by customer)

Reason for return:

H:\Forms\Quality Assurance\approved QA Online\RA revK



**HELICOPTER
TRANSPORT
SERVICES**

Helicopter Transport Services, LLC
14497 Keil Road NE, Aurora, OR 97002
Phone: 503-776-9300 Fax: 503-776-9304
<http://www.htshelicopters.com/>

Overhaul Order #HTR-5416

Date	Jan 24, 2019
Created By	jerrys
Type	Overhaul
Currency	USD
Page 1 / 1	

Overhaul Order #HTR-5416

To	Order from
DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY ON K6A2H8 CANADA Tel: 613-632-3336, Fax: 613-632-4443 Email: lcantin@dartaero.com / Lacey Cantin ext 247	UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 USA Tel: 503-776-9300, Fax: 503-776-9305
Ship to	Bill to
UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 Accounting: htsaccounting@htshelicopters.com Procurement: htsparts@htshelicopters.com Tel: 503-776-9300, Fax: 503-776-9305	UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 Accounting: htsaccounting@htshelicopters.com Procurement: htsparts@htshelicopters.com Tel: 503-776-9300, Fax: 503-776-9305

** Work to be accomplished at this time **

Please, perform Overhaul

Parts description

Part Number	Description	Tracking #	Ser/Batch #	TTSN	TTSO	Reg	Est. Cost
C-10	REMOTE CARGO HOOK, 10,000 LBS	123363	M883-01				1491.00
C.C	1141	Defect	RA# Removed from N91158, Due Overhaul evaluation. Cost Estimate and Approval is Required on all items. Completed certification must match repair/overhaul order. Certificate of conformance is required. Please notify Helicopter Transport Services if you are unable to comply with this requirement. All quotes or questions should be directed to Jerry Sullivan sulliivanj@htshelicopters.com 503-776-9300 ext 112				

When the work is completed, please return the part(s) via FEDEX ECONOMY no: 2698 8834 2

Signature

Date

RETURN AUTHORIZATION



RA #:

RA562

Date:

January 25, 2019

Attention:

Jerry Sullivan

E-mail:

sullivanj@htshelicopters.com

From:

Jennifer Renwick

RETURN ADDRESS

☒ Hawkesbury

Dart Aerospace Ltd

1270 Aberdeen Street

Hawkesbury, ON K6A 1K7, CA

1-613-632-3336

☐ Vista

Dart Aerospace Ltd.

3030 Enterprise Court, Suite A

Vista, CA 92081-8347, US

1-760-724-5300

☐ Eugene

Dart Aerospace Ltd.

190 S. Danebo Avenue

Eugene, OR 97402, US

1-541-344-9953

SHIPPING

Courier: Customers Choice

Account #: Customers Account

COMMERCIAL INVOICE INFORMATION

Item #1		Item #2	
P/N:	C10	P/N:	0
Description:	Hook	Description:	0
Qty:	1	Qty:	0
Flown:	N/A	Flown:	0
Customs Value USD:	\$500	Customs Value USD:	\$0
Batch / Serial #	M883-01	Batch / Serial #	0
Item #3		Item #4	
P/N:	0	P/N:	0
Description:	0	Description:	0
Qty:	0	Qty:	0
Flown:	0	Flown:	0
Customs Value USD:	\$0	Customs Value USD:	\$0
Batch / Serial #	0	Batch / Serial #	0
Item #5		Item #6	
P/N:	0	P/N:	0
Description:	0	Description:	0
Qty:	0	Qty:	0
Flown:	0	Flown:	0
Customs Value USD:	\$0	Customs Value USD:	\$0
Batch / Serial #	0	Batch / Serial #	0

ADDITIONAL RETURN AUTHORIZATION INFORMATION

- Print RA form, complete Part Disposition section and include a copy with the shipment.
- Ensure the RA number is referenced on all documents. Failure to do so may result in delivery refusal.
- Ensure the shipment is directed to the correct facility referenced above. Failure to do so will result in delays and additional shipping costs.
- Commercial invoice must include the following statement: "Parts are aircraft parts being returned to the manufacturer."
- International shipments require commercial invoice attached to the outside of the box.
- Where applicable, the original Release Certificate, STC's, Installation Instructions, Maintenance Manual Supplement, Flight Manual Supplement, packing slips and removable tag must accompany the shipment.
- Return authorization expires in 30 days. If no charge products were supplied, these will be invoiced upon expiration of the RA.
- Returned items will be fully inspected by Quality Control and credit will be issued for items deemed to be new, un-flown, traceable and to the current revision.
- A 15% minimum restocking fee applies, additional fees may apply upon receipt and inspection if items require rework or cannot be returned to stock
- Items should be adequately packaged to prevent shipping damage.
- For complete terms & conditions, visit www.dartaerospace.com

PART DISPOSITION (To be completed and returned by customer)

Reason for return:

H:\Forms\Quality Assurance\approved QA Online\RA revK



**HELICOPTER
TRANSPORT
SERVICES**

Helicopter Transport Services, LLC
14497 Keil Road NE, Aurora, OR 97002
Phone: 503-776-9300 Fax: 503-776-9304
<http://www.htshelicopters.com/>

Overhaul Order #HTR-5416

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Page 1 / 1

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When the work is completed, please return the part(s) via FEDEX ECONOMY no: 2698 8834 2

Signature

Date



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042571



Supplier: SKY002-VC
Skyservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

PO No: PO042571
PO Date: 2/11/19
Due Date: 2/15/19
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	187761	D4884-1	End Fitting, Eye : Various STC's (Outsource process - NDT per QSI038 4.1)ISSUE P/O	Firmed	-	2/15/19	6 pcs	0 pcs	6 pcs	\$50.857142/pcs	\$305.14
Line Item Note ** need asap **											
2	OH189825	C10-OH	C-Series Remote Hook 10,000 lbs Lift Capacity	Firmed	-	2/15/19	1 pcs	0 pcs	1 pcs	\$50.857142/pcs	\$50.86
Line Item Note Includes: C10-12 - selenoid C10-23 - Keeper Weldment											
Grand Total:										\$356.00	

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

**skyservice****Work Order Traveler**
Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO39292	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO042571 ✓
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON :

✓ 6 END FITTINGS . P/N# D4884-1, J/S# 187761

✓ 1 C-SERIES REMOTE HOOK ASSY(14 PCS) , P/N# C10-OH , J/S# OH189825 = 14 PCS.

Action Taken:						Date:	Initial/Stamp:
LPI & MPI C/O IAW ASTM E-1417M-16 AND ASTM E-1444M-16 ***NO CRACK FOUND*** PEN , ZL-37 MPO#: 23206 CLEANER SKC-S MPO15030, EMU.(ZR-10B, MPO23451), DEV. MPO15030, UV LIGHT M-20142 MAGBENCH S/N 208123 CAL DUE: 05-APR-2019 POWDER 14A BATCH# MPO13600 CARRIER II BATCH# MPO13923 BLACK LIGHT-M20186						12 FEB 2019	DOT-APP 61 53-89 J
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:		ACA/SCA Stamp	Date:
Name:	ANTONINO Marchetti	DOT-APP 61 53-89	12 FEB 2019

Jennifer Renwick

From: Caitlin Crooks
Sent: Wednesday, February 06, 2019 11:39 AM
To: Jesse White
Cc: Linda Lacelle; Jason Leroux
Subject: FW: RA562 parts approval
Attachments: SKM_C224e_Q19020115590.pdf

Good to move ahead with the RA562, customer has accepted

From: Jesse White <jwhite@dartaero.com>
Sent: Friday, February 01, 2019 4:01 PM
To: Caitlin Crooks <ccrooks@dartaero.com>
Subject: RA562 parts approval

From: print.hby@dartaero.com [<mailto:print.hby@dartaero.com>]
Sent: February-01-19 4:00 PM
To: Jesse White <jwhite@dartaero.com>
Subject: Message from DartAerospace QualityAssurance C224e



RAS62

Overhaul Incoming Inspection
C10 Cargo Hook

Customer

OH189825

Date

2019/FEB/01

Part Number

C10

Serial Number

M883-01

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

C10-12 SELENOID

☐

C10-23 KEEPER WELDMENT

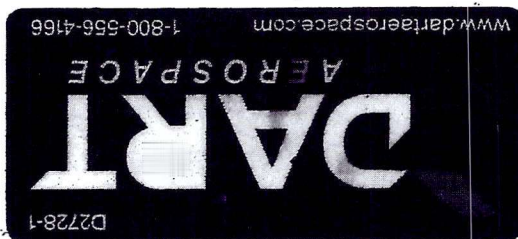
☐☐☐☐☐☐☐☐☐

Inspected By

ALAIN PATRY

NICKEL PLATING

DATE: 2019/03/21



MODEL: C10

S/N : M883-01

JOB : 0H189825 / RA562

P/N	DESCRIPTION	QUANTITY
C10-SA	LOAD BEAM	1
C10-9-1	LATCH	1
C10-4	LOCK	1
C10-10-1	ACTUATOR SHAFT	1
C10-4-2	LOWER LOCK ROLLER	1
C10-4-3	UPPER LOCK ROLLER	1
C10-4-5	LOWER LOCK ROLLER SHAFT	1
C10-9-5	LATCH SHAFT	1



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042977



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042977
PO Date: 3/25/19
Due Date: 4/1/19
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	OH189825	C10-OH	C-Series Remote Hook 10,000 lbs Lift Capacity -Issue P/O; -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Material type; 4140 -Certificate of Conformity is required	Firmed X1	-	4/1/19	1 pcs	0 pcs	1 pcs	\$400.00/pcs	\$400.00

APR 09 2019

DAS
68
9-89

Line Item Note ** NEED BACK MARCH 29, 2019 * RUSH **

2	OH191622	C60-OH	C-Series Remote Hook 6,000 lbs Lift Capacity -Issue P/O; -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Material type; 4140 -Certificate of Conformity is required	Firmed X1	-	4/1/19	1 pcs	0 pcs	1 pcs	\$350.00/pcs	\$350.00
---	----------	--------	--	--------------	---	--------	-------	-------	-------	--------------	----------

MAR 29 2019



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042977



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	OH190613	4.5NR-OH	Nubbins Receiver Hook -Issue P/O to GROUPE ALTECH: P/O -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Certificate of Conformity is required	Firmed XI	-	4/1/19	1 pcs	0 pcs	1 pcs	\$120.00/pcs	\$120.00
	OH190626			Firmed	-X	4/1/19	1 pcs	0 pcs	1 pcs	\$120.00/pcs	\$120.00
	OH190625			Firmed	-X	4/1/19	1 pcs	0 pcs	1 pcs	\$120.00/pcs	\$120.00
Sub Total:							3	0	3		\$360.00
Grand Total:										\$1,110.00	

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/26/19 11:57 AM dart.Lussier.Patrick



Certificat de Conformité / Certificate of Compliance



0 1 7 9 7 1 - 1

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

017971- 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
28-Mar-2019		Shankar Anand			042977			
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C10-OH Rev.	C10-OH SANDBLAST PAINT PARTS STRIP NICKEL PARTS NICKEL PLATE QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006 BAKE AFTER PLATING	E-NICKEL-500 LOT	1	1	0	0	0
2	C60-OH Rev.	C60-OH 01 -E-NIC STEEL 200 [E-NICKEL STEEL 200] QQ-N-290 CLASS 2 GRADE E OR F 0.0004 TO 0.0006 THICK BAKE AFTER PLATING	E-NICKEL-200 LOT	1	1	0	0	0
3	4.5NR-OH Rev.	4.5NR-OH 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500] 0.004 TO 0.006 THICK AND BAKE	E-NICKEL-200 CH	3	3	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.



Remote Cargo Hook Test Form

C10

Work Order 189825Customer 562Serial Number M 883-01Date 2019-5-6

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	25,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	Pass
10	5,000	Electircal, 25 volts	No "hang ups" permitted	N/A	Pass
2	10,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	Pass
2	7,500	Electircal, 22 volts	Current shall not exceed 12.4A	8.8 Amp.	Pass
2	5,000	Electircal, 22 volts	Current shall not exceed 12.4A	8.5 Amp.	Pass
2	2,500	Electircal, 22 volts	Current shall not exceed 12.4A	8.0 Amp.	Pass
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	7.7 Amp.	Pass
1	10,000	Electircal, 20 volts	Current shall not exceed 11.3A	7.0 Amp.	Pass
1	10,000	Electircal, 28 volts	Current shall not exceed 15.8A	9.9 Amp.	Pass
1	10,000	Manual		N/A	Pass
1	10,000	Impact Test	Impact shackle 10 times, shall not release	N/A	Pass
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	2.0 Ohms	Pass
1	N/A	Electircal Continuity	Across both wires	N/A	Pass

Test Conducted By

Mehul Lalonde

Technician

Signature:

Sylvie Pancher

QC 5 Small FAB / QA

Submit